

Amendment to the Claims

1. (Currently Amended) A light source device, comprising:
- a bulb inside which a discharge medium is sealed;
- an internal electrode disposed at an end portion inside the bulb;
- an external electrode disposed outside the bulb;
- ~~a dielectric member disposed on a first portion of the bulb so as to be interposed between the bulb and the external electrode, the first portion of the bulb being an outside surface of the bulb in the vicinity of the internal electrode so as to be interposed between the bulb and the external electrode at a portion in an elongation direction of the bulb; and~~
- ~~a holder member holding the external electrode so that a second portion of the bulb and the external electrode are opposed to each other with a predetermined distance of a space therebetween, the second portion being an outside surface of the bulb, wherein the second portion does not overlap the first portion of the bulb remaining portion of the bulb other than the portion where the dielectric member exists and the external electrode are opposed to each other with a predetermined distance of a space.~~

2. (Currently Amended) The light source device according to claim 1, wherein the distance of the space between the external electrode and the bulb is not less than a shortest distance defined by the following equation,

$$X L = \frac{V}{E_0} - \frac{\epsilon a}{\epsilon g} \times t_g$$

wherein:

X1L: XL represents the shortest distance;

E0: E0 represents dielectric breakdown voltage;

V: V represents input voltage;

εa: εa represents relative permittivity of air;

εg: εg represents relative permittivity of a vessel wall of the bulb; and

t_g: t_g represents thickness of the vessel wall of the bulb.

3.(Previously Presented) The light source device according to claim 1, wherein the internal electrode comprises a proximal end positioned on an end portion side of the bulb, and a distal end positioned on a center portion side of the bulb relative to the proximal end, and
wherein a dimension of the dielectric member in an elongation direction of the bulb and a position of the dielectric member in the elongation direction of the bulb are set so that a distal end of an image of the internal electrode projected onto the external electrode is positioned on the dielectric member.

4.(Original) The light source device according to claim 3, wherein the dielectric member comprises a proximal end positioned on the end portion side of the bulb, and a distal end positioned on the center portion side of the bulb relative to the proximal end, and
wherein the proximal end of the dielectric member is positioned on the end portion side of the bulb relative to the distal end of the internal electrode, and the distal end of the dielectric

member is positioned on the center portion side of the bulb relative to the distal end of the internal electrode.

5.(Previously Presented) The light source device according to claim 1, wherein the dielectric member is disposed so as to be in contact with an outer surface of the bulb.

6.(Previously Presented) The light source device according to claim 1, wherein the dielectric member is disposed so as to be in contact with the external electrode.

7.(Previously Presented) The light source device according to claim 1, wherein the dielectric member comprises only a dielectric material.

8.(Previously Presented) The light source device according to claim 7, wherein a relative permittivity of the dielectric material is not less than 4.7.

9.(Previously Presented) The light source device according to claim 1, wherein the dielectric member comprises a dielectric portion made of a dielectric material, and a conductive portion made of a conductive material.

10.(Previously Presented) The light source device according to claim 9, wherein the conductive portion is disposed inside the dielectric portion.

11.(Previously Presented) The light source device according to claim 10, wherein the dielectric portion comprises a first dielectric layer positioned on the side of the bulb and a second dielectric layer positioned on the side of the external electrode, and
wherein the conductive portion comprises a conductive layer disposed between the first dielectric layer and the second dielectric layer.

12.(Previously Presented) The light source device according to claim 11, wherein the conductive layer is a sheet member made of the conductive material.

13.(Previously Presented) The light source device according to claim 11, wherein the conductive layer is a mesh member made of a conductive material.

14.(Previously Presented) The light source device according to claim 10, wherein the conductive portion is an elongated member embedded in the dielectric portion.

15.(Previously Presented) The light source device according to claim 1, further comprising a conductive member disposed within the bulb at a position corresponding to the internal electrode and the dielectric member.

16.(Previously Presented) The light source device according to claim 15, wherein the conductive member comprises a proximal end positioned on the end portion side of the bulb, and

a distal end positioned on the center portion side of the bulb relative to the proximal end portion, and

wherein a dimension of the conductive member in an elongated direction of the bulb and a position of the conductive member in the elongation direction of the bulb are set so that a distal end of an image of the conductive member projected onto the external electrode is positioned on the dielectric member.

17.(Previously Presented) A lighting device, comprising:

the light source device according to claim 1; and,
a light guide plate having a light incidence surface and a light emission surface and guiding a light emitted from the light source device from the light incidence face to the light emission face for emission.

18. (Previously Presented) A liquid crystal display device, comprising:

the light source device according to claim 1;
a light guide plate having a light incidence surface and a light emission surface and guiding a light emitted from the light source device from the light incidence face to the light emission face for emission; and
a liquid crystal display panel disposed so as to be opposed to the light emission face of the light guide plate.

19-21. (Cancelled)